

ADB Economics Working Paper Series



The Service Sector in India

Arpita Mukherjee

No. 352 | June 2013

Asian Development Bank



ADB Economics Working Paper Series

The Service Sector in India

Arpita Mukherjee No. 352 June 2013 Arpita Mukherjee is Professor at the Indian Council for Research on International Economic Relations, a think-tank based in New Delhi, India.

Asian Development Bank 6 ADB Avenue, Mandaluyong City 1550 Metro Manila, Philippines www.adb.org

© 2013 by Asian Development Bank June 2013 ISSN 1655-5252 Publication Stock No. WPS135784

The views expressed in this paper are those of the author and do not necessarily reflect the views and policies of the Asian Development Bank (ADB) or its Board of Governors or the governments they represent.

ADB does not guarantee the accuracy of the data included in this publication and accepts no responsibility for any consequence of their use.

By making any designation of or reference to a particular territory or geographic area, or by using the term "country" in this document, ADB does not intend to make any judgments as to the legal or other status of any territory or area.

Note: In this publication, "\$" refers to US dollars.

The ADB Economics Working Paper Series is a forum for stimulating discussion and eliciting feedback on ongoing and recently completed research and policy studies undertaken by the Asian Development Bank (ADB) staff, consultants, or resource persons. The series deals with key economic and development problems, particularly those facing the Asia and Pacific region; as well as conceptual, analytical, or methodological issues relating to project/program economic analysis, and statistical data and measurement. The series aims to enhance the knowledge on Asia's development and policy challenges; strengthen analytical rigor and quality of ADB's country partnership strategies, and its subregional and country operations; and improve the quality and availability of statistical data and development indicators for monitoring development effectiveness.

The ADB Economics Working Paper Series is a quick-disseminating, informal publication whose titles could subsequently be revised for publication as articles in professional journals or chapters in books. The series is maintained by the Economics and Research Department.

CONTENTS

| ABST | RACT | V |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| I. | OVERVIEW | 1 |
| II. | A. Classification and Governance B. Contribution to Gross Domestic Product C. Employment D. Labor Productivity E. Future Growth ASSESSING THE OPENNESS OF THE SERVICE SECTOR | 2 3 5 6 8 |
| | A. Trade B. Investments | 8 10 |
| III. | BARRIERS AND REFORMS | 12 |
| IV. | CONCLUSIONS AND THE WAY FORWARD | 16 |
| REFE | RENCES | 18 |

ABSTRACT

The service sector is the largest and fastest growing sector in India and has the highest labor productivity, but employment has not kept pace with the share of the sector in gross domestic product and has not produced the number or quality of jobs needed. There is no policy leading to inclusive growth, and multiple, uncoordinated governing bodies adversely affect the growth of the sector. Many regulations are outdated, and there are restrictions and barriers on foreign direct investment. While India is among the top 10 World Trade Organization members in service exports and imports, the growth and export of services is less than that of the People's Republic of China, and exports are competitive in only a few services and are concentrated in a few markets. Most of the poor in India do not have access to basic services such as healthcare and education, and infrastructure is weak so the cost of service delivery is high. Although India wants to be a knowledge hub, there is no uniformity in the quality and standards of education, and formal education does not quarantee employability. Policy measures are suggested for inclusive growth that will also enhance India's global competitiveness in services.

Keywords: services, growth, employment, productivity, India

JEL classification: O14, O40, O47, L80, L88

I. OVERVIEW

In developing countries like India, the service sector can lead to inclusive growth through backward and forward links (Banga 2005), by ensuring equitable access to basic services at low prices (Deloitte 2011), by creating employment opportunities, and by developing human capital. India is among the world's rapidly growing economies. In 2010, the gross domestic product (GDP) grew at 10.6% compared to an average growth rate of 7.5% in emerging and developing economies. Although the growth rate decreased to 7.2% in 2011, it was still higher than the average growth rate of emerging economies (6.2%). The service sector has been a major contributor to India's GDP and to its growth. It is the second largest employer after agriculture. India's trade in services has increased overtime, and services account for the largest share in India's foreign direct investment (FDI) inflows and outflows.

The growth of India's service sector has drawn global attention. Unlike other countries where economic growth has led to a shift from agriculture to industries, in India there has been a shift from agriculture to the service sector. In this respect, India has been considered as an outlier among South Asia and other emerging countries (Ansari 1995). Gordan and Gupta (2003) and Jain and Ninan (2010) have, however, pointed out that with the rise in per capita income, the share of services in GDP increases. Kochhar et al. (2006) argued that India was a negative outlier in 1981 compared to other emerging markets as the share of services in value added and employment was below that of other countries. After the 1990s, the service sector grew, and in 2000 India became a positive outlier in terms of the share of services in value added but continued to be a negative outlier in terms of its share in employment.

The growth in the service sector in India has been linked to the reforms of the 1990s. In the first 3 decades after independence in 1947, India was largely an agrarian economy. The service sector started to grow in the mid-1980s, but growth accelerated in the 1990s when India initiated a series of economic reforms after the country faced a severe balance of payments crisis. Reforms in the service sector were a part of the overall reform program which led to privatization, the removal of FDI restrictions, and streamlining of approval procedures among others.

Existing literature shows that liberalization and reforms have contributed to the growth of the sector (Chanda 2002, Gordan and Gupta 2003, Jain and Ninan 2010). With economic growth and the rise in per capita income, demand changed from necessary to discretionary consumption and propelled the growth of services (McKinsey & Company 2007), and the elasticity of demand for services at high incomes has contributed to the growth of the sector (Bhattacharya and Mitra 1990, Gordan and Gupta 2003). Technological progress and the availability of highly skilled manpower has led to the growth of services in information and communication technology (ICT) and ICT-enabled services (Chanda 2002). Developed countries now outsource services to developing countries like India, leading to a rise in demand for services (Bhagwati 1984, Hansda 2001). Significant government expenditures on community, social, and personal services have also accelerated growth in the sector (Ansari 1995).

Some studies have pointed out barriers to growth in services including lack of decent employment (Basu and Maertens 2007), a poor business environment (Joshi 2008), lack of an integrated service sector policy (Banga 2005), and a strong focus on skill-intensive services and

¹ International Monetary Fund (2012).

higher education while a majority of the population remains unskilled and poorly educated (Kochhar et al 2006).

A. Classification and Governance

The service sector can be classified either by using the country's own definition or by using the United Nations Central Product Classification (UNCPC). The UNCPC is used as a basis for international negotiations like those of the World Trade Organization (WTO). In India, the National Industrial Classification provides classifications for services. Since the sector is evolving, both have undergone changes. At present, the National Industrial Classification 2008 is used (Box 1) though there are differences between it and the UNCPC, e.g., construction is not a part of the sector in India while it is in the UNCPC.

Box 1: Services Included in the Service Sector in the National Industrial Classification 2008

- Wholesale and retail trade; repair of motor vehicles and motorcycles
- Transportation and storage
- · Accommodation and food service activities
- Information and communication
- Financial and insurance activities
- Real estate activities
- Professional, scientific, and technical activities
- Administrative and support services
- Public administration and defense; compulsory social security
- Education
- Human health and social work activities
- Arts, entertainment, and recreation
- Other service activities
- Activities of households as employers; undifferentiated goods and services producing activities of households for own use
- · Activities of extraterritorial organizations and bodies

Source: Extracted from National Industrial Classification 2008, http://mospi.nic.in/Mospi_New/upload/nic_2008_17apr09.pdf

Disaggregated data for many services are not available. Government departments such as the Central Statistical Organisation and the National Sample Survey Organisation under the Ministry of Statistics and Programme Implementation and the Reserve Bank of India have been trying to collect and collate disaggregated data; however, since services such as retailing and construction are largely in the non-corporate (informal or unorganized) sector, there is both misreporting and under-reporting.

India has a quasi-federal governance structure; some services are under the jurisdiction of the central government (Union List), some are under the state governments (State List) and the remaining are under the joint administration of central and state governments (Concurrent List) (Box 2). Multiple ministries and central government departments regulate services such as energy and transport while others like construction and retail do not have nodal ministries. Services like telecommunications have one independent regulator while others like electricity have state regulators as well. Professional bodies regulate professions such as doctors, architects, and accountants.

Box 2: Jurisdictions in the Service Sector

- Union List
 - Telecommunications, postal, broadcasting, financial services (including insurance and banking), national highways, mining services
- State List
 - Healthcare and related services, real estate services, retail, services incidental to agriculture, hunting, and forestry
- Concurrent List
 - Professional services, education, printing and publishing, electricity

Source: Author's compilation from the Constitution of India, 1950.

B. **Contribution to Gross Domestic Product**

Table 1 shows that over time, the share of services in GDP has increased while that of agriculture has declined. In the last decade, the share of services surpassed the combined share of agriculture and industry making it the most important contributor to the country's output. In fiscal year (FY) 2009, services accounted for 57.3% of India's GDP² which was less than that of countries such as the United Kingdom (UK) at 78.4% and the United States (US) at 78.2%. but higher than that of the People's Republic of China (PRC) at 41.8%.

Table 1: Average by Decade of the Share of Sectors in India's Gross Domestic Product (%)

| Sector | 1950s | 1960s | 1970s | 1980s | 1990s | 2000s |
|-------------|-------|-------|-------|-------|-------|-------|
| Agriculture | 55.3 | 47.6 | 42.8 | 37.3 | 30.9 | 21.8 |
| Industry | 14.8 | 19.6 | 21.3 | 22.3 | 23.3 | 24.5 |
| Services | 29.8 | 32.8 | 35.9 | 40.3 | 45.7 | 53.7 |

Source: Author's calculations from National Income Accounts

The growth of the service sector accelerated in the late 1980s, and in the late 1990s it surpassed the growth of industries to become the fastest growing sector of the Indian economy (Figure 1). In FY2009, the service sector grew at 9.96% compared to 8.81% growth in the industry sector and 1.57% in agriculture.4 The compound annual growth rates (CAGR) of services in the PRC and India from 2001 to 2010 were 11.3% and 9.4%, respectively. This implies that even though the present share of services in GDP for the PRC is lower than that of India, in future the share of services will be higher and can even surpass that of India since it is growing at a faster rate.

Author's calculations from National Income Accounts. Please note that all calculations are made on GDP at real prices, constant at 1999-2000 and 2004-2005.

Economic Survey of India 2011–2012.

Author's calculations from National Income Accounts.

Economic Survey of India 2011–2012.

20 15 10 5 0 -5 -10 -15 10 2007-2008 2007-2008 2007-2008 2007-2008 2007-2008 2007-2008 2007-2008 1997-1998 1998-1996 1983-1994 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-1996 1983-199

Figure 1: Growth of Economic Sectors in India

Source: Author's calculations from National Income Accounts.

There are variations in the growth and performance of different types of services. Business services, communications, and trade have grown faster than the overall sector has while others such as real estate, legal services, transport, storage, personal administration, and defense have grown at the same rate (Gordon and Gupta 2003). Domestic demand for services such as telecommunications and financial services along with exports of ICT have contributed to the high growth of these services.

Table 2 shows that after the 1990s, the share of all types of services in GDP increased but the share of community, social, and personal services declined in the sector overall.

Table 2: Average by Decade of the Share of Service Types in the Sector Overall and in Gross Domestic Product (%)

| | 1950s | | 1970s | | 1990s | | 2000s | |
|-------------------------------------------------------------------|----------------------|--------------|----------------------|--------------|----------------------|--------------|----------------------|--------------|
| Items | Share in Services | Share in GDP |
| Community, social, and personal services | 35 | 10.4 | 35.1 | 12.6 | 30.3 | 13.9 | 26.1 | 14.0 |
| Financing, insurance, real estate, and business services | 25.2 | 7.5 | 20.3 | 7.3 | 26.2 | 12.0 | 27.3 | 14.7 |
| Trade, hotels, and restaurants | 28.5 | 8.5 | 30.2 | 10.8 | 28.5 | 13.0 | 29.4 | 15.8 |
| Transport, storage, and communication | 11.3 | 3.4 | 14.5 | 5.2 | 15.0 | 6.9 | 17.3 | 9.3 |

Source: Author's calculations from National Income Accounts.

In the 1950s and 1960s, transport, storage, and communication and trade, hotels, and restaurant services grew faster than the overall sector while in the 1970s and 1980s, financing and business services started growing and in the 1980s surpassed transport, storage, and communication and trade, hotels, and restaurants. From 2000 to 2010, transport, storage, and communication were the fastest growing followed by financing and business services (Figure 2).

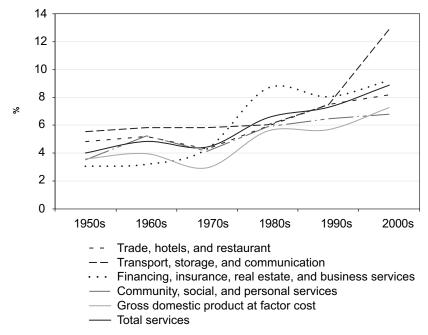


Figure 2: Average by Decade in the Growth of Service Industries

Source: Author's calculation from National Income Accounts.

C. **Employment**

There has been a lot of debate about the capacity of the service sector to generate employment. It has been argued that employment growth has not kept pace with income growth in the sector (Bosworth and Maertens 2010) or with the rise in its share of GDP (Kochhar et al. 2006). Furthermore, the change in the production structure from agriculture to services has not been reflected by a proportionate change in the occupational structure (Bhattacharya and Mitra 1990). As a result, service-led growth has been jobless growth (Banga 2005).

Table 3 shows that in FY1993, close to 63% of the population was engaged in agriculture while 22% worked in services (in both the formal and informal sectors). Over time, the percentage of people employed in agriculture has declined and employment in services has increased, although agriculture continues to have the highest share. Within services, there has been a change in the pattern of employment. The share of wholesale and retail trade has increased while the share of public administration and defense has declined.

Table 3: Employment in Different Sectors and Service Industries as a Percentage of Total **Employment by Fiscal Years**

| Category | 2009-2010 | 2004-2005 | 1999–2000 | 1993-1994 |
|-------------------------------------------------------------------------------------|-----------|-----------|-----------|-----------|
| Agriculture | 53.2 | 58.5 | 61.7 | 62.8 |
| Industry | 21.5 | 18.1 | 15.9 | 15.2 |
| Services | 25.3 | 23.4 | 22.4 | 22.0 |
| Wholesale and retail trade; repair of motor vehicles, motorcycles, and personal and | | | | |
| household goods | 9.5 | 9.0 | 8.7 | 7.7* |
| Hotels and restaurants | 1.3 | 1.3 | 1.1 | |
| Transport, storage, and communications | 4.3 | 3.8 | 1.1 | 3.4 |
| Financial intermediation | 0.8 | 0.6 | 0.5 | 1.0* |
| Real estate, renting, and business activities | 1.3 | 0.9 | 0.6 | |
| Public administration and defense; compulsory | | | | |
| social security | 2.1 | 1.8 | 2.5 | 9.5* |
| Education | 2.6 | 2.4 | 2.0 | |
| Healthcare and social work | 0.8 | 8.0 | 0.6 | |
| Other community, social, and personal service | | | | |
| activities | 1.9 | 1.8 | 2.4 | 0.3* |

^{*}Note that in FY1993, the National Industrial Classification 1987 was used.

Source: Author's calculations from the National Sample Survey Office reports on employment and unemployment in India, various issues.

In FY2009, services accounted for around 62% of total employment in the organized (formal) sector; however, within the service sector, over 80% of the employment was in the unorganized (informal) sector. Finance, insurance, real estate, and business services and community, social, and personal services largely provide organized employment while retail and wholesale trade largely provide unorganized employment.

A large part of the organized employment in services is concentrated in the public sector; in fact, in FY1993, around 86% of the total was in the public sector, but by FY2009 it had declined to 75%. Trade, hotels, and restaurants are the only activities in which the share of the public sector is less than that of the private sector.

Overall, employment in the service sector in India is lower than its share in GDP, but it is growing. The sector has the largest share of organized employment, but within services, the organized share is small with the public sector dominating. The private sector has not been very successful in creating organized service sector employment.

D. **Labor Productivity**

It is difficult to do a productivity analysis in India since data on total employment are not calculated on a yearly basis and a great deal of employment in services is informal. Existing studies have, however, concluded that labor productivity has been the highest in the service sector, particularly in the decades after 1980. Using output data from National Accounts Statistics and employment data from other secondary sources, Bosworth and Maertens (2010) found that total factor productivity (TFP) was highest in service sector (Table 4).

The organized sector consists of registered companies or units. These are professionally managed with transparent accounting systems and follow government regulations and legislation such as labor laws.

1.9

1990-2000 Sector 1980-1990 2000-2006 Total Economy 2.2 1.8 2.1 Agriculture 1.9 0.7 0.9 Industry 1.5 0.6 1.6

3.1

Table 4: Total Factor Productivity for Major Sectors in India, 1980–2006 (%)

Source: Extracted from Bosworth and Maertens (2010), Table 2.3, p. 119.

2.1

Services

Eichengreen and Gupta (2010) used the National Accounts Statistics and cross-country data from the European Union (EU) KLEMS⁸ and showed that the skill content in both the manufacturing and service sectors is increasing over time. The authors divided the service sector into three groups (Table 5) and pointed out that productivity growth was the highest in Group 3. Within this group, the fastest growing types are business services, communications, and banking, and growth in exports has contributed to the growth of most services. Group 1 has low elasticity of demand and Group 2 has a cost-disease problem⁹ leading to low productivity.

Table 5: Categories of Services Based on their Productivity Growth

| Group 1: Traditional Services | Group 2: Hybrid of Traditional and Modern Services | Group 3: Modern Services |
|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Retail and wholesale trade, transport and storage, public administration, defense | Education; healthcare and social work; hotels and restaurants; other community, social, and personal services | Financial intermediation, computer services, business services, communications, legal and technical services |

Source: Author's compilation from Eichengreen and Gupta (2010).

An ongoing productivity research study 10 funded by the Reserve Bank of India shows that from 1980 to 2008, TFP growth in India was highest in the service sector at 1.58% per annum followed by agriculture at 1.06% and manufacturing at 0.3%. Economy-wide estimates recorded an annual labor productivity growth rate of around 4.5% from 1980 to 2008 while the growth rates in labor productivity for services, agriculture, and manufacturing were 3.52%, 1.94%, and 5.45%, respectively. The study further found that labor productivity rates for services increased from 2.69% per annum from 1980 to 1999 to 6% from 2000 to 2008 due to growth in post and telecommunications, hotels and restaurants, and trade. Healthcare and social work, other services, and education registered lower rates which is a cause for concern.

The outcome of this study suffers from a lack of disaggregated data. For instance, it does not distinguish between growth in telecommunications and postal services. It is expected that the high productivity is largely driven by telecommunications since the postal service in India is still a government monopoly that suffers from over-employment.

KLEMS refer to growth accounting with capital, labor, energy, material, and services.

Baumol's cost disease occurs when there is a productivity lag or low productivity growth due to the nature of the

The study is by researchers at the Indian Council for Research on International Economic Relations. This is a work in progress and findings of the project are not in the public domain.

It is difficult to compare different studies on productivity in services due to inconsistencies in the data and in classifications; however, the broad findings show that TFP in the service sector has been the highest and that communication services are one of the major propellers of growth in sector productivity in India.

E. Future Growth

India's economic growth slowed to 6.9% in 2012; nevertheless, it is projected to grow at 7.3% in 2013 which is higher than the 6% average projected growth rate for emerging and developing economies. 11 In the past decade with the rise in GDP and per capita incomes, the number of people below the poverty line has declined. McKinsey & Company (2007) forecast that if the Indian economy grows at the rate of 7.3% between 2005 and 2025, then by 2025, 583 million Indians will be in the middle class which is the equivalent of the current population of Australia. The share of the middle class in the total population will increase from around 5% in 2005 to 41% in 2025, and they will account for 59% of the country's total consumption. With the increase in incomes, there has also been an increase in the literacy rate which is expected to improve further. 12 Moreover, India has one of the youngest populations in the world with 54% below 25 years of age. 13 All this is leading to a change in consumption patterns with an increase in demand for discretionary services like education, private healthcare providers, personal care, and hotels and restaurants. The Indian market is large and unsaturated, and most services have been opened up for foreign investment. India wants to be a knowledge-based hub, and the government is promoting exports of services. All these factors will drive the future growth of the service sector.

Indian government projections show that the sector will grow at a fast pace. The Planning Commission estimates that the economy will grow at 9.5% in the 12th Five Year Plan (2012–2017), and the service sector is projected to grow at the rate of 10%. Certain services like trade, hotels and restaurants, transport, storage, communications, financing, insurance, and real estate are expected to grow faster than the sector overall while others like community, social, and personal services may grow at a slower pace.

II. ASSESSING THE OPENNESS OF THE SERVICE SECTOR

Reforms and liberalization along with technological developments; the growth of multinationals; new delivery models; and a large, unsaturated domestic market have enhanced India's trade and investment in services.

A. Trade

In the post-reform period (1991–2008), India's trade in services recorded substantial growth as the country became globally competitive in ICT services which increased exports many fold and led to an increase in India's trade surplus (Alejandro et al. 2010). Service exports have contributed to inclusive economic growth by increasing the number of well-paid jobs and by reallocating labor to a high-productivity sector. Service exports have also increased tax revenues and have stimulated domestic demand, including demand for infrastructure.

¹¹ World Economic Outlook August 2012.

As per the United Nations Development Programme (2009), between 1980 and 2007, there has been an increase in adult literacy of 25% and in combined gross school enrolment of 20%.

For details see http://nrhm-mis.nic.in/UI/Public%20Periodic/Population_Projection_Report_2006.pdf

Existing literature shows that there have been changes in the composition of trade from traditional services such as travel and transport toward knowledge-based and business services (Chanda 2002) and that India has export potential in skill-based and labor-intensive services (Ministry of Finance 2007).

Trade in services has been growing rapidly in the past 2 decades. In the 1980s it was valued at \$6 billion and in 2010, it reached \$240 billion. India's service exports not only grew more rapidly than the country's merchandise exports, they also grew faster than global service exports. From 1980 to 2010, India's service exports grew at a CAGR of 13.2% while world exports of services grew at the rate of 7.84%. A substantial part of this growth (21.7%) was in the post-reform period (1991-2010). 14 In the 1980s and 1990s, India had a negative trade balance in services, but from 2004 on, the balance has been positive.

In the 1980s, trade in services contributed to 20% of India's total trade. In 2010, the share increased to 30.4% compared with the global average of 24%. Trade in services as a percentage of GDP increased from 3.2% in 1980 to 13.9% in 2010; 15 however, this is still low compared to the contribution of the service sector to India's GDP.

India's share in world trade in services increased from less than 1% to over 3% between 1980 and 2010, while its share in goods trade remained constant at 1%. While world trade in services is still dominated by the developed countries, emerging economies like the PRC and India are now among the top 10 exporters and importers of services among WTO members. In 2011, India was the eighth largest exporter while its rank in importing services remained seventh. The PRC was the fourth largest exporter of services. 16

India has both export and import interests in services. With a huge English-speaking, skilled work force available at competitive prices, the country has created a niche for itself in exporting knowledge-based services but needs foreign investment and best management practices in infrastructure services.

Developed countries are the major trading partners for India in services. By country, the US is the largest export destination followed by the UK and other European countries and other English speaking countries like Canada. India imports the bulk of its services from Australia. France, Germany, Japan, the Republic of Korea, the UK, and the US.

Export and import trends in different types of services show that from 2000 to 2010, financial services grew at an average annual rate of 34.6% followed by computer and information services at 22.6% and insurance services at 20.2%. From 1980 to 2010, exports of business services grew at an average annual rate of 12.6% compared to 12% in transport and 7.6% in travel services. In 2010, computer and information services were 48.5% of India's total service exports followed by other business services (23.4%), travel (11.4%), transportation (10.7%) and financial services (4.9%). Transportation services accounted for around 37.5% of India's total imports in 2010. From 1980 to 2010, imports of transportation services grew at an average annual rate of 11.5%. 17

Author's calculation using data obtained from United Nations Conference on Trade and Development (UNCTAD) database on International Trade—Services (accessed 2 March 2012).

World Bank World Development Indicators (accessed 12 December 2012).

¹⁶ World Trade Organization. 2012.

United Nations Conference on Trade and Development Database on International Trade—Services (accessed 2 March 2012).

To understand the pattern of specialization in service trading and whether or not the sector in India is globally competitive, the revealed comparative advantage (RCA) was calculated using Balassa's index (Balassa 1965). If the RCA is greater than 1, the country is said to have a comparative advantage in a particular service compared with rest of the world. Table 6 shows that India has a strong comparative advantage in computer and information services.

Table 6: India's Revealed Comparative Advantage in Service Exports

| Sectors | 1980 | 1990 | 2000 | 2005 | 2008 | 2009 | 2010 |
|-----------------------------------------------|------|------|------|------|------|------|------|
| Communications | 0.0 | 0.0 | 1.7 | 1.3 | 1.0 | 0.6 | 0.5 |
| Computer and information | 0.0 | 0.0 | 10.1 | 9.9 | 8.6 | 8.8 | 7.9 |
| Construction | 0.0 | 0.0 | 1.6 | 0.3 | 0.3 | 0.3 | 0.2 |
| Financial | 0.0 | 0.0 | 0.3 | 0.3 | 0.5 | 0.6 | 0.7 |
| Government services n.i.e. | 0.5 | 0.1 | 1.5 | 0.3 | 0.2 | 0.2 | 0.2 |
| Insurance | 0.7 | 1.4 | 0.9 | 1.0 | 0.7 | 0.7 | 0.7 |
| Other business services | 1.2 | 2.0 | 1.1 | 1.0 | 0.9 | 0.7 | 1.0 |
| Personal, cultural, and recreational services | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 | 0.5 | 0.3 |
| Royalties and licence fees | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| Transport | 0.5 | 8.0 | 0.5 | 0.5 | 0.5 | 0.6 | 0.5 |
| Travel | 2.0 | 1.1 | 0.7 | 0.5 | 0.5 | 0.5 | 0.5 |

Note: n.i.e.=not included elsewhere.

Source: Author's calculation from United Nations Conference on Trade and Development (UNCTAD) Database on International Trade—Services (accessed 2 March 2012).

B. Investments

In the post-liberalization period, the service sector has attracted significant foreign investment due to the availability of skilled labor at lower wages and the large and unsaturated domestic market. According to the A.T. Kearney Global Services Location Index, in 2011 India was the leading outsourcing destination among 50 countries followed by the PRC. India's rank is high due to human resources (2nd), but it ranked poorly in terms of business environment (43rd).

According to the A.T. Kearney FDI Confidence Index, ¹⁸ in 2012 India was the second most attractive destination for FDI after the PRC; however, the Inward FDI Performance Index of the United Nations Conference on Trade and Development (UNCTAD)¹⁹ which compares the relative performance of 141 countries in attracting FDI found that India has performed poorly compared with other developing countries. In 2010, India was ranked 97th; comparative rankings for Brazil, the PRC, and Mexico were 69th, 79th, and 84th, respectively. Thus, while multinational companies have shown confidence in India, the country has not been able to attract much FDI. This may be because the reform program has slowed recently creating uncertainties. The Inward FDI Potential Index which evaluates the host country's ability to attract FDI compared with other countries based on selected factors²⁰ shows that India improved its ranking from 86th in the 1990s to 79th in 2010. Thus, India has the potential to attract more FDI

The index is based on a survey of senior executives of multinational companies from 25 countries and shows the present and future prospects for FDI. For details see Kearney (2011)

For details see http://archive.unctad.org/Templates/WebFlyer.asp?intItemID=2471&lang=1; the lower the rank, the better the country's performance.

²⁰ Factors are GDP per capita; the rate of GDP growth over the past 10 years, etc. For details, see http://archive.unctad.org/Templates/WebFlyer.asp?intltemID=2470&lang=1

in the future if appropriate policy measures are undertaken and business hurdles are addressed.

Economic reforms in general and the liberalization of the FDI policy in particular have led to substantial increases in FDI since the 1990s. In the 1980s, India received \$0.08 billion in FDI which increased to \$42.5 billion in 2008 and then declined due to the global slowdown to \$24.6 billion in 2010. Cumulative FDI equity inflows were \$179 billion from April 2000 to August 2012.²¹ In 2009, India's share of worldwide FDI was 2.44%, up from 0.15% in the 1980s; however. India's share declined to 1.98% in 2010.22 The bulk of FDI in India is routed through Mauritius. Other important investing countries include Japan, Singapore, the UK, and the US.

At present, FDI is allowed in most but not all services in the sector (Table 7). In the postliberalization period, the overall sector has been the largest recipient of FDI with a share of over 50% between 2000 and 2011. Financial services, telecommunication services, and computer software and hardware were large recipients.

Table 7: Foreign Direct Investment Limits in the Service Sector in India

Foreign Direct Investment Prohibited

Real estate business or construction of farm houses, railway transport services (other than mass rapid transport systems), postal services, telegraph services, professional services (legal services, accounting, auditing and bookkeeping services, taxation services, atomic energy, lottery business

Up to 20%

Banking services - public sector*

Up to 26%

Broadcasting services (terrestrial broadcasting, uplinking), print media,* and insurance services*

Up to 49%

Petroleum refining by public sector undertakings, air transport services for domestic scheduled passenger airline (100% for non-resident Indians), private security agencies, financial services*, cable networks

Up to 51%

Multi-brand retail trading*

Up to 74%

Broadcasting services (teleports, direct-to-home, mobile TV and Headend in the Sky (HITS), air transport services (non-scheduled air transport service), establishment and operation of satellites and telecommunication services Up to 100%

Services incidental to mining,* oil and gas, services incidental to energy distribution, audio-visual services,* telecommunication services,* distribution services,* single-brand retail trading,* courier services for carrying packages, education services, healthcare and related services, tourism and travel-related services, transportation services

Note: In the services marked '*', additional conditions are imposed on foreign companies.

Source: Author's compilation from Consolidated FDI Policy 2012 of the Department of Industrial Policy and Promotion.

In FY2010, India's FDI outflow in the service sector was \$10.3 billion out of the total outflow of \$14.6 billion.²³ In FY2011, 62.1% of India's outward investments were in services followed by the manufacturing sector at 31.4%. Within the sector, financial, insurance, real estate, and business services accounted for 29% of total outward investments followed by transport, communication, and storage (15.3%) and wholesale and retail trade and restaurants

Department of Industrial Policy and Promotion. 2012.

Compiled by the author from UNCTAD database on foreign direct investment (accessed 2 March 2012).

Extracted from Khan (2012) Table 3 p. 7.

and hotels (11.5%). The major destinations included Mauritius, the Netherlands, Singapore, and the US.

III. BARRIERS AND REFORMS

The analysis in the previous sections shows that the service sector has increasingly contributed to India's GDP, GDP growth, employment, trade, and investment; however, there are some concerns that are preventing the sector from contributing to inclusive growth. First, GDP growth has slowed down which has affected growth in the service sector. Second, the sector has not been able to create enough employment either in terms of numbers or quality of jobs. Third, although India has been portrayed as a major exporter of services, the country's ranking among WTO members in service exports is lower than that of the PRC, and India is globally competitive in only one industry: computer and information services. Fourth, India has the potential to attract FDI, but it has not been successful in doing so. This section discusses some of these key barriers and suggests reforms that will enhance productivity and efficiency and help to attain inclusive growth.

• Service sector focus in policymaking. There is no government policy on how the sector can lead to inclusive growth. This is partly because the focus is on agriculture and manufacturing, and the service sector has largely been left to grow on its own. There is no nodal ministry for services like retailing while for others like transport and energy there are multiple ministries with conflicting interests. The quasi-federal governance structure has led to multiple regulatory bodies, numerous regulations, and multiple clearance requirements. For example, there are around 13 regulatory bodies for higher education, and each of them functions in isolation.²⁴ There is an urgent need to focus on the service sector and to identify the key barriers faced by different types of services and then to undertake specific reforms. For instance, in road transport, reforms should focus on establishing a seamless supply chain by removing barriers to the interstate movements of goods. This can be done with the help of technology such as computerizing check posts at state borders and with regulations such as implementing single goods and service taxes.

In the case of industries like energy, various government departments should work together to design a policy that will facilitate equitable access at affordable prices. The policy should lay down a short-term strategy (5 years coinciding with the 5-year plans) and a long-term strategy (10–15 years) for development. A nodal agency can be identified for each service and given the responsibility to see that the strategies are implemented. To standardize policies across states, the central government can come up with model regulations that the state governments can implement. It is important to note that there are disparities in performance across states and that poor states seem to do badly in service infrastructure and in delivering public services like healthcare and education. For inclusive growth, policies have to focus on state-specific requirements.

Regulatory reforms. Some regulations do not take into account technological
developments while others are outdated or do not follow international best practices. In
areas like transportation, there is a lack of comprehensive regulations enabling
integrated door-to-door service which increases waste in the supply chain. In addition,
existing regulations do not take into account the characteristics of new services such as

²⁴ Working Group Report for Twelfth Five Year Plan on Higher Education, Department of Higher Education.

direct selling and express delivery. Lack of prescribed standards and common accreditation also adversely affect services like construction and education.

While deregulation and removing regulatory barriers are often necessary for service sector growth (Hoekman and Mattoo 2011, Jain and Ninan 2010), in India it may not necessarily be true. For example, the privatization of Indian airports led to an arbitrary increase in tariffs prior to the appointment of the Airport Economic Regulatory Authority. Since many services have erstwhile been public monopolies, the vested interests of the government and of public sector units adversely affect performance as they get preferential prices in commodities like energy. Moreover, government procurement is not always transparent, e.g., private companies working for the railways have to procure materials from vendors selected by the railways. In many services, especially infrastructure, it is often difficult for the private sector to enter and operate due to a lack of third party access and of transparent procedures for sharing scare resources among other problems. Thus, a lack of regulation is restricting the competition and efficient service provision necessary for inclusive growth.

Privatization should be accompanied by appropriate regulations based on global best practices. Regulations should be transparent and non-discriminatory, should take into account the evolving nature of the service sector and its links with other sectors, and should support its growth. Procedural hurdles can be removed by implementing one-stop clearances for projects and FDI. Monopolies in sectors such as railways and the post should be gradually phased out and at a minimum, commercially delivered services should be privatized. Public Procurement Bill 2011 should be implemented.²⁵ The need for regulators in specific areas should be examined and if required, independent regulators should be appointed.

Removal of FDI restrictions. According to the Organisation for Economic Co-operation and Development's (OECD) FDI Restrictive Index 2010, India is considered more restrictive than the Republic of Korea and less so than the PRC and Japan (Figure 3) but is one of the few countries that has FDI restrictions on services that are hampering its ability to attract investment and best management practices.

Since the government does not have adequate resources, it is important to encourage private and foreign investment in the service sector to facilitate inclusive growth. To attract FDI, the policy should be transparent, technology neutral, and should not distinguish between domestic and foreign companies. To counter any adverse impacts, regulations can be in place to monitor the sector.

Public Procurement Bill 2011 seeks to regulate any government purchase of more than \$90,000 through transparent bidding.

Total Foreign Direct Investment Index

Operational Restrictions

Operational Restrictions

New Personnel

PRC — India Japan — Republic of Korea

Figure 3: Foreign Direct Investment Index for Selected Countries, 2010

Notes:

PRC = People's Republic of China.

The closer the score is to zero, the more open the economy. The index is based on combined scores of equity restriction, screening requirements, key personnel requirements, and operational restrictions.

Source: Kalinova, et. al. (2010), Table III-1, p. 19.

• **Service sector employment and education.** Employment opportunities and quality education are both necessary for inclusive growth. There is a skill shortage in ICT and organized retail. According to the Electronic and Computer Software Export Promotion Council, approximately 5,000 people are needed every year to meet the demand of the ICT industry, but the total available from educational and training institutes is only a third of this number. This is leading to a rise in salaries (average salary increase was 11% in 2012), 26 high attrition rates, and a high cost of operations. Studies (Mukherjee and Goyal 2012) have shown that although employees prefer to work in the formal sector for better salaries and job security, skill requirements are different, and it is not easy for employees to shift from the informal to the formal sector.

In India, the gross educational enrollment ratio is low, and there are wide variations in quality across institutions. Degrees granted by some private universities are not recognized even within India thus further affecting employability. ²⁷ In many cases companies have to invest substantially in training employees. Critics have argued that the government's education policy and funding have focused on higher education and have neglected primary education (Kochhar et al. 2006). There are reserved seats for the so-called backward classes in higher education but not in primary education; this is not based on income. Also, labor productivity is lower in social services like healthcare and education which affects inclusive growth.

²⁶ Hewitt (2012).

²⁷ McKinsey (2011).

To create quality employment in the service sector, it is important to encourage growth in the formal sector. The government can work with industries and with educational institutions in public-private partnerships to identify skill requirements and design appropriate courses and training programs to facilitate their development. Today, private organizations can operate only as not-for-profit institutions in education. The government may consider allowing for-profit education while putting in place a regulatory framework to ensure that participants meet a required standard. This will facilitate private investment. Focusing on vocational training and developing appropriate curricula will increase the employability of students in the service sector. The quality of education can be improved through proper accreditation at international standards.

Taxes and subsidies. India has a high corporate tax rate of 30%-40% compared to around 17% in Singapore and up to 25% in the PRC. For commodities like petroleum, there are multiple taxes and levies that vary across states. Sometimes, taxes have adverse impacts on the use of the most efficient technologies. For instance, although multi-axle vehicles are more efficient than single-axle vehicles, the motor vehicle tax is levied based on gross vehicle weight rather than on potential axle loads. This results in under-taxation of two-axle trucks. In the Union Budget for FY2012, the government proposed imposing a retrospective tax ²⁸ which was sharply criticized by foreign investors. Cross-subsidization and inappropriate subsidies have led to misallocations of resources. In railways the average passenger tariff in India is 55% lower than in the PRC while the average freight tariff is 66% higher.²⁹ Similarly, while the commercial sector has to pay a higher power tariff, the agriculture sector, irrespective of land size, is highly subsidized.

A number of tax reforms including the pending single goods and service tax and the Direct Tax Code Bill of 2010 should be implemented, and cross-subsidies should be minimized. For inclusive growth, subsidies should be targeted to the poor and needy.

Access and availability of infrastructure. Unlike countries like the PRC, in India government investment in infrastructure is low and has not been able to meet demand. For instance, most ICT companies have to invest in power units due to the erratic power supply. This increases their costs. Companies in construction, ICT, hospital services, and retail, among others, find it difficult to acquire property due to the lack of urban planning, restrictive zoning regulations, outdated laws related to land conversion, and the lack of clear ownership and titles to land. This causes delays in project implementation. In addition, due to poor infrastructure planning, the full benefits of existing investments cannot be reaped. The government needs to act as a facilitator so that private developers have access to basic facilities like land. There is a need for proper urban and infrastructure planning. The focus should not only be on creating new infrastructure but also on efficiently using existing infrastructure.

Government of India, Planning Commission (2005).

The government in the 2012 Finance Bill has proposed amendments in the Income Tax Act of 1961 with retrospective effect to bring in taxes on net overseas mergers and acquisitions involving Indian assets.

• Research and development and ICT. Both can play key roles in inclusive growth by ensuring access to cheaper technology and by disseminating knowledge. In India, expenditures on research and development were low at around 0.8% of GDP in 2012.³⁰ The share in the private sector was only 0.25% of GDP compared to 1.2%–2.0% in emerging economies.

In 2010, India had 1.53 Internet subscribers per 100 inhabitants compared to 8.35 in the PRC and 35.68 in the Republic of Korea.³¹ This is a cause for concern as India aspires to be a knowledge hub. Due to low ICT penetration, 67% of the revenue is from exports; the domestic market accounts for only 33%.³²

The Indian government can encourage investments in research and development through public–private partnerships and through fiscal incentives such as tax benefits, grants, and subsidies. ICT penetration can be increased through appropriate policies like tax incentives for setting up broadband infrastructure in rural areas or developing content in local languages. Low-cost consumer devices such as laptops, tablets, and personal computers can support ICT penetration.

• Trade. India's trade in services largely comprises computer and software services, and exports are concentrated in a few markets. For instance, the US accounted for 56.5% of total computer software/service exports in FY2009 followed by the European Union at 31.3%. India needs to diversify its export basket and markets. A country cannot sustain its global position in trade in services by exporting manpower. Moreover, the movement of people is a sensitive issue. If India wants greater market access for the temporary movement of people, it has to remove FDI restrictions on a reciprocal basis. Unless India undertakes domestic reforms, it will be difficult to achieve.

IV. CONCLUSIONS AND THE WAY FORWARD

The service sector is the largest and fastest growing sector in India, it has the highest labor productivity, and it is projected to continue to grow at a fast pace. The share of services in India's total trade is higher than the global average, and India is among the top 10 WTO members in service exports and imports. There are, however, a number of concerns. India does not have a policy that can lead to inclusive growth, and numerous governing bodies and a lack of coordination among them adversely affect the growth of the sector. In many types of services, the regulations are outdated, and there are FDI restrictions and regulatory barriers. The sector has not been able to create sufficient employment either in terms of number or quality of jobs. India's service sector growth and exports of services are lower than that of competing countries like the PRC, and exports are competitive in a few services only and are concentrated in a few markets. There are wide variations in the growth of different types of services and great disparities in access to services; a major proportion of the poor in India do not have access to basic services such as healthcare and education. Infrastructure is weak, so the cost of service delivery is high. Although India wants to develop as a knowledge hub, there is no uniformity in the quality and standards of education, and formal education does not guarantee employability.

³⁰ Economic Survey of India 2011–2012.

³¹ ICT Statistics Database, International Telecommunication Union (accessed 11 May 2012).

Author's calculation from NASSCOM Strategic Review Report 2012.

³³ Electronics and Computer Software Export Promotion Council. Statistical Year Book 2009–2010.

The service sector will be able to contribute to inclusive growth by enhancing investment, creating employment and human capital, and developing infrastructure. It is important for a developing country like India with a large, young population to generate quality employment and to move up the value chain. India needs private investments in key infrastructure services such as transport, energy, and telecommunications. It can attract FDI and private investment only with a stable, transparent, non-discriminatory, competitive policy environment. If the reforms suggested here are implemented, they will enhance the productivity and efficiency of the service sector and lead to inclusive growth.

REFERENCES

- Alejandro, Lisa, Eric Forden, Allison Gosney, Erland Herfindahl, Dennis Luther, Erick Oh, Joann Peterson, Matthew Reisman, and Isaac Wohl. 2010. An Overview and Examination of the Indian Services Sector. *Office of Industries Working Paper Series*. No. ID-26. Washington, DC: International Trade Commission. http://www.usitc.gov/publications/332/working_papers/ID-26.pdf
- Ansari, M. I. 1995. Explaining the Service Sector Growth: An Empirical Study of India, Pakistan, and Sri Lanka. *Journal of Asian Economics*. 6 (2). pp. 233–246.
- Balassa, Bela. 1965. Trade Liberalization and Revealed Comparative Advantage. *Manchester School of Economic and Social Studies*. 33. pp. 99–123.
- Banga, Rashmi. 2005. Critical Issues in India's Service-led Growth. *Indian Council for Research on International Economic Relations (ICRIER) Working Paper Series.* No. 171. New Delhi: ICRIER.
- Basu, Kaushik and Annemie Maertens. 2007. The Pattern and Causes of Economic Growth in India. *Center for Analytical Economics Working Paper Series*. No. 07-08. Ithaca: Cornell University.
- Bhagwati, Jagdish N. 1984. Splintering and Disembodiment of Services and Developing Nations. *The World Economy*. 7 (2). pp. 133–144.
- Bhattacharya, B. B. and Arup Mitra. 1990. Excess Growth of Tertiary Sector in the Indian Economy: Issues and Implications. *Economic and Political Weekly.* 25 (44). pp. 2445–2450.
- Bosworth, Barry and Annemie Maertens.2010. Economic Growth and Employment Generation: The Role of the Service Sector. In Ejaz Ghani, ed. *The Service Revolution in South Asia*. New Delhi: Oxford University Press.
- Chanda, Rupa. 2002. Globalization of Services: India's Opportunities and Constraints. New Delhi: Oxford University Press.
- Deloitte. 2011. .Inclusive Growth: A Challenging Opportunity. Deloitte and All India Management Association. September. .http://www.deloitte.com/assets/Dcom-India/Local%20Assets/Documents/Inclusive Growth
- Eichengreen, Barry and Poonam Gupta. 2010. The Service Sector as India's Road to Economic Growth? *Indian Council for Research on International Economic Relations (ICRIER) Working Paper Series* No. 249. New Delhi: ICRIER.
- Electronics and Computer Software Export Promotion Council (ESC). Statistical Year Book 2009–2010. New Delhi: ESC.
- Gordon, Jim and Poonam Gupta. 2003. Understanding India's Services Revolution. Paper prepared for the International Monetary Fund-National Council of Applied Economic Research Conference A Tale of Two Giants: India's and [the People's Republic of] China's Experience with Reform. New Delhi. 14–16 November.

- Government of India, Ministry of Commerce and Industry, Department of Industrial Policy and Promotion (DIPP). 2012. Consolidated FDI Policy- Effective from April 10, 2012. http://dipp.nic.in/English/Policies/FDI Circular 01 2012.pdf ----. 2012. FDI Factsheet. August. http://www.wto.org/english/res e/statis e/ its2012 e/its2012 e.pdf Ministry of Finance, Department of Economic Affairs. 2007. Strategy for India's Services Sector: Broad Contours. Working Paper 1. http://finmin.nic.in/workingpaper/ 1_2007_DEA.pdf —. 2011–2012. Union Budget and Economic Survey. http://indiabudget.nic.in/budget2012 -2013/survey.asp Ministry of Human Resource Development, 2011, Report of the Working Group on Higher Education for the XII Five-Year Plan, Department of Higher Education. New Delhi. —. Ministry of Home Affairs. 2006. Population Projections for India and States 2001–2026. Report of the Technical Group on Population Projections Constituted by the National Commission Population. Census of https://nrhm on India. 2001. -mis.nic.in/UI/Public%20Periodic/Population Projection Report 2006.pdf —. Ministry of Statistics and Programme Implementation, National Accounts Statistics. Central Statistical Organisation. http://mospi.nic.in/Mospi New/site/home.aspx -. National Sample Survey Office Reports on Employment and Unemployment in India, various issues. http://mospi.nic.in/Mospi New/site/ inner.aspx?status=3&menu id=31 —. 2008. National Industrial Classification (All Economic Activities) – 2008. Central Statistical Organisation. http://mospi.nic.in/Mospi New/ upload/nic 2008 17apr09.pdf -. Planning Commission. 2005. Chapter 9: Transport and Communication: Mid Term Appraisal of the Tenth Five Year Plan. http://planningcommission.nic.in/plans/
- Hansda, S. K. 2001. Sustainability of Services-led Growth: An Input-Output Analysis of Indian Economy, Reserve Bank of India Occasional Working Paper Series. Vol. 22 Nos. 1, 2, and 3. New Delhi: Reserve Bank of India

mta/midterm/english-pdf/chapter-09.pdf

- Hewitt, Aon. 2012. India Inc May Give up to 20% Pay Hike to Staff in 2012: The Economic 21 February. http://articles.economictimes.indiatimes.com/2012-02-21/news/ 31083113 1 aon-hewitt-highest-hike-cent-respondents
- Hoekman, Bernard and Aaditya Mattoo. 2011. Services Trade Liberalization and Regulatory Reform: Re-invigorating International Cooperation. Policy Research Working Paper Series No 5517. Washington, DC: World Bank.
- ICT Statistics Database. International Telecommunication Union. http://www.itu.int/ ITU-D/ict/statistics/index.html

- 2012. International Monetary Fund (IMF). World Economic Outlook. http://www.imf.org/external/pubs/ft/weo/2012/01/pdf/text.pdf Washington, DC: IMF.
- Jain, Sunil and T.N. Ninan. 2010. Servicing India's GDP Growth. In Acharya, Shankar and Rakesh Mohan, eds. India's Economy: Performance and Challenges - Essays in Honour of Montek Singh Ahluwalia. New Delhi: Oxford University Press.
- Joshi, Seema. 2008. Service Sector in India's Economy: Performance, Problems and Prospects. Country Paper submitted for Study Meeting on Expansion and Development of the Services Industry in Asia organised by Asian Productivity Organization. Seoul: 17-20 June.
- Kalinova, Blanka, Angel Palerm, and Stephen Thomsen. 2010. OECD's Foreign Direct Investment Restrictiveness Index: 2010 Update. OECD Working Papers on International 2010/3. OECD Division. Investment No. Investment www.oecd.org/daf/investment/workingpapers
- Kearney, AT. 2011. Off shoring Opportunities amid Economic Turbulence. The A.T. Kearney Global Services Location Index. http://www.atkearney.com/documents/10192/f062cfd8 -ee98-4312-ae4f-0439afc10880
- ——. 2012. Cautious Investors Feed a Tentative Recovery. The AT Kearney Foreign Direct Investment Confidence Index. http://www.atkearney.com/documents/10192/fdaa84a5 -a30a-4e4e-bc36-453375d6596f
- Khan, Harun R. 2012. Outward Indian FDI—Recent Trends and Emerging Issues. Address delivered by Shri Harun R. Khan, Deputy Governor, Reserve Bank of India at the Chamber of Commerce and Industry. 2 March. http://rbi.org.in/scripts/BS SpeechesView.aspx?Id=674.
- Kochhar, Kalpana, Utsav Kumar, Raghuram Rajan, Arvind Subramanian, and Ioannis Tokatlidis. 2006. India's Pattern of Development: What Happened, What Follows? Journal of Monetary Economics. 53 (5). pp. 981–1019.
- McKinsey & Company. 2007. The Bird of Gold: The Rise of India's Consumer Market. McKinsey Global Institute. http://www.mckinsey.com/mgi/reports/pdfs/india consumer market/MGI india consumer full report.pdf
- . 2011. http://www.mckinsey.com/locations/southeastasia/knowledge/Education Roundtable.pdf
- Mukherjee, Arpita and Tanu M. Goyal. 2012. Employment Conditions in Organised and Unorganised Retail: Implications for FDI Policy in India. Journal of Business and Retail Management Research. 6 (2). pp. 26-37.
- National Association of Software and Services Companies (NASSCOM). 2012. Strategic Review Report. http://www.nasscom.org/
- Organisation for Economic Co-operation and Development. 2010. FDI Regulatory Restrictiveness Index. http://www.oecd.org/investment/fdiindex.htm

- United Nations Commission on Trade and Development. Inward FDI Performance Index and FDI Potential http://archive.unctad.org/Templates/ Inward Index. WebFlyer.asp?intItemID=2470&lang=1
- Trade—Services. http://unctadstat.unctad.org/ Database on International ReportFolders/reportFolders.aspx
- United Nations Development Programme. 2009. Overcoming Barriers: Human Mobility and Development. Human Development Report—2009. http://hdr.undp.org/en/media/ HDR 2009 EN Complete.pdf
- World Bank. World Development Indicators database. http://data.worldbank.org/data -catalog/world-development-indicators
- World Trade Organization. 2012. International Trade Statistics. http://www.wto.org/ english/res_e/statis_e/its2012_e/its2012_e.pdf

The Service Sector in India

The study finds that the service sector is the largest and fastest growing sector in India, but it has not been able to create employment in terms of number and quality. India's exports are competitive in only a few services and are concentrated in a few markets. The study identifies the barriers to inclusive growth of the service sector and makes policy recommendation to enhance global competitiveness of the sector and develop India as a knowledge hub.

About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to two-thirds of the world's poor: 1.7 billion people who live on less than \$2 a day, with 828 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

Asian Development Bank 6 ADB Avenue, Mandaluyong City 1550 Metro Manila, Philippines www.adb.org/economics